

up onto the eastern Piedmont). Others are virtually excluded from the mountains, except where they have followed major stream valleys headward (cf. maps 29, 30, 32, 34, 37, 42) particularly when such "eastern" species show up also on the upper Tennessee headwaters (maps 48, 53, 59) paralleling the occurrence of sweetgum in Virginia. It is intriguing that so many of such species extend up to the Blue Ridge front but have not been taken in the Roanoke valley, topographically only a western-lobe of the Piedmont.

In any event, we now have graphic evidence about where the holes are: places where even salvageable roadkills should not be passed over. Presumably the same lacunae exist for amphibian records, so Virginia naturalists can help to make more complete maps to appear in the forthcoming amphibian volume.

A reviewer seems expected to find some typos or some point or other with which he doesn't agree (perhaps to prove that he really went through the book carefully). I have found this a difficult course to follow, because of general satisfaction with both the substance of the content and the physical layout of the book.

Of course, one can't be faulted for wishing to see more of a good thing, so here are a few items on my personal want list, against possible future revisions:

I think it would be neat to have a chart, maybe in a "box", entitled "Turtles through field glasses" or something similar. It is true that the head and neck of most of our species are illustrated in color photos, but it would help in sorting out basking specimens (at a distance) to have a complete set of even diagrammatic sketches all together, B&W would do fine, of head and neck (and shell when pertinent) with the diagnostic features pointed out with an arrow or line (à la Peterson).

Regarding the maps, it would seem useful to represent different subspecies by different symbols (e.g., king snakes, Map 43, and ring-neck snakes, Map 36). The Virginia distributions of subspecies, and their inter-gradient areas, are discussed in the text, but one gets a better perception from different symbols, with intergrades shown by X symbols and their general area by shading.

And as regards physical composition of the product itself:

Format of headings and selection of type styles seem to favor subordinate side headings (in bold face) over major center heads (species names, &c.) which are set in a much lighter type face. A quick glance at a page often fails to pick up where one species account stops and another starts. The side headings for subspecies trinomials

seem ungenerously small, too (I admit to having a personal bias for subspecies, however). On balance the design and format are excellent: the type face is eminently readable and the pages have an open, clean appearance. The book is notably "browseable" and the fluent writing style invites the casual reader to pause to enjoy the less technical paragraphs. Typos are remarkably scarce, reflecting intense proof-reading efforts by author and the editorial staff. The only one I have found escaping such scrutiny is the occasional spelling of "Trichoptera" without the "h", hardly a matter of any consequence.

While the book is a long overdue milestone in Virginia natural history, its financial support during years of preparation by the "Nongame Program" of the Virginia Department of Game & Inland Fisheries reflects a significant change in values during the past several decades. Not too long ago the investment of donated public funds (derived largely from voluntary income tax checkoffs) to finance a book on reptiles would have been unthinkable. Now, at least a wide spectrum of naturalists will endorse with appreciation the wisdom of VDGIF's support and confidence.

A cadre of the authors' friends and colleagues, including this reviewer, have hovered on the fringes of the enterprise since its inception with barely contained impatience, offering whatever encouragement and material assistance they could. Their long wait has been more than amply rewarded. Now a second wait begins, as Joe Mitchell turns to Virginia's amphibians, certainly a more difficult group to treat. That he will rise to the occasion no one doubts, but still, *The Reptiles of Virginia* will be a hard act to follow.

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Obituary

†Horton Holcombe Hobbs, II

(1914-1994)

With the death on March 23rd, in his home at Falls Church, Virginia, of Horton Hobbs, the scientific community has lost the acknowledged premiere specialist on crayfish and related crustaceans, and the world is

bereft of a man for whom the phrase "gentleman and scholar" might well have been devised. Following several years of slowly declining vigor, Dr. Hobbs died in his sleep of heart failure after a normal day at home. He missed his 80th birthday by only three days.

Horton Hobbs entered the University of Florida in 1933 to major in music. When he complained, during his required course in general biology, of being given a substandard crayfish to dissect, he was given a dipnet and told to go out and get a fresh one. The act of catching one and observing it alive completely metamorphosed his interests, and a new career was started that day, one which would take him to the apex of his profession.

Following publication of his doctoral dissertation ("The Crayfishes of Florida") in 1942, Horton was invited to join the biology faculty of the University of Virginia in 1946, and immediately took up the study of the local crayfish fauna. In teaching he favored the old-fashioned, classical, field-oriented study of organisms as total entities, with emphasis on such basics as taxonomy, evolution, and structure. In the years that followed, he attracted and trained a long sequence of students at both master's and doctoral levels; many of these students in turn became teachers and produced a second generation of scholars trained in the Hobbsian mold. Some made major contributions to the knowledge of Virginia's natural history.

In the 1950s, the University's biology department followed a national trend and "went molecular". Fortunately, not long afterwards, the position of Chief Curator of Zoology became open at the U. S. National Museum, and Hobbs applied successfully for it, moving in 1961 to the house on Lake Barcroft where he lived thenceforth. Unfortunately, after a few years of mostly administrative work, cardiac problems developed and further exposure to stress became dangerous. The Smithsonian thereupon transferred Hobbs to the position of "Senior Scientist" which required only research duties. Here his productivity increased even more, and descriptive treatments of crayfish, shrimp, crabs, and ostracods proceeded at the rate of 5 to 10 papers annually. During this period he gradually completed his *opus magnum*, the spectacular "Crayfishes of Georgia" (1981, Smithsonian Contributions to Zoology 318: 1-549), in which the 66 native species are treated with astonishing detail and depicted with beautiful drawings. 43 years of collecting and study preceded publication of this masterpiece, which will probably never equalled by a similar faunistic work. I do not have at hand a complete list of his papers, but know that they exceed 80 on crayfish (several book length) and

over 30 on other taxa. Many were coauthored, and reflecting Hobbs' generosity were his minimal requirements for coauthorship: sometimes for no other reason than to reward the collector of a new species, or in appreciation of someone doing no more than inking his pencil drawings.

Among colleagues and even casual acquaintances, the commonly shared descriptors used to characterize Horton Hobbs were such terms as scholarly, charming, generous, considerate, courtly. The expression "quintessential Southern gentleman" has never been applied more aptly to any scientist or teacher of my acquaintance, nor been more merited. It was a turning point in my own life to come under Hobbs' influence when still a 3rd year student at U. Va., when we jointly decided that Diplopoda would be a good group for me to specialize on. It was my exceptional good fortune to be in effect his first student, in the year before bona fide graduate students began to show up. I became virtually a member of the family, given a key to the basement lab, treated to frequent meals, and allowed to look after the two young children when he and his wife Georgia went out for an evening. I perceived the Hobbsian life style as idyllic, and would have lived mine the same way, given the opportunity. In the years and decades that followed, I never saw any reason to revise that initial impression.

It would be difficult for me to recount all of his graduate students and their contributions on the biota of Virginia. Two of the first cadre were Perry C. Holt, whose doctoral work was on the branchiobdellid ecto-commensals of crayfish, and Marvin L. Bobb, whose task was a survey of the aquatic and semiaquatic bugs of the state. Holt spent some years at East Tennessee State University, then moved to VPI&SU where he completed his academic career and while there directed the graduate work of James E. Carico (pisaurid spiders), J. E. Lawson (pseudoscorpions), and Charles R. McGhee (opilionids). All of these people collected actively in Virginia. By an interesting twist of fate, I also "Ph.D.'ed" with Professor Holt (on the taxonomy of branchiobdellids) and thus became a Hobbsian graduate student once removed. Marvin Bobb returned to economic entomology, but his dissertation, updated, was published in 1974 as part 7 of "The Insects of Virginia" and has been widely cited. Jean E. Pugh conducted a faunistic-ecological study of the mayflies of the Piney River in Nelson County, turning up a new species in the process. Hugo James revised the *Cambarus longulus* group which is largely endemic to Virginia. Hobbs himself named several native species of

crayfish: *Orconectes virginianus* from the Chowan River system, *Cambarus wheeleri* from the Powell drainage in Lee County, and *Cambarus angularis* from the upper Tennessee basin but never got around to a state survey. He once told me he was working northward, and having covered Florida and Georgia had to write up South and North Carolina first. But field work! I cannot imagine a place in Virginia not represented in the USNM collection! It used to be a game for me to find an obscure species in some obscure place, and then check his geographic card file for Virginia records. So often he already had it from that county or even that same place. Somebody who aspires to write up a "Crayfishes of Virginia" will find virtually everything needed on the shelves at Washington.

Later in life, after retirement from the National Museum staff, Horton was advised to have a triple-bypass procedure performed. This was eminently successful, he described it to me as one of the best things that ever happened to him. And for another decade or two he continued, through his sixties and early seventies, to dipnet and seine stream crayfishes, and dig out the burrowers, all over southern and eastern United States. For some years he went in to work every morning (early!) and was solely in charge of the crayfish collection. Daily he thus conducted an extensive correspondence, reviewed manuscripts, entertained visitors, and still managed to push his projects forward. During the past two or three years, however, health problems became sequential and his stamina declined. Only one visit per week to the museum was possible. In 1989 he served the Virginia Museum of Natural History as one of the charter members of the Board of Trustees, but was forced to relinquish this position because the increasing severity of his wife's health problems made it impossible for him to bring her to meetings or leave her anywhere, unsupervised.

We had the honor of publishing what I am sure is the last paper he wrote (there may be others still in press): the description, coauthored with Raymond Bouchard, of *Cambarus angularis* in *Jeffersoniana* no. 5 earlier this year. By the end of 1993, his voice and handwriting had become notably feeble, yet the inked drawings which he produced were as precise and elegant as those from mid-career.

Horton Hobbs enjoyed other gifts. He was a natural musician, and could play on the piano (by ear!) any piece that he knew or was hummed or whistled for him. For some years he was the organist for his church in Charlottesville. Taking up oil painting one day, he produced

from the very first quite credible portraits of family members. From Smithsonian artist Carolyn Gast, he learned the technique of carbon dust rendition, and illustrated some of his papers with drawings of near photographic realism. And an honest capacity for enjoying life. During the Smithsonian years the Hobbs family went several times to Europe, and it is a measure of the man that he found Parisians (even waiters) to be friendly and courteous, surely an exceptional testimonial to someone who judged others by himself.

He is survived by his wife Georgia and two children, Nina Blount Hobbs Singleton, who is a successful businesswoman in Ardmore, Pa., and Horton H. Hobbs, III, professor of biology at Wittenberg University, who has followed in his father's footsteps by specializing in crustacean systematics. He is survived in a broader sense by the multitude of persons whose lives he touched and made better, as teacher, colleague, friend, or combination of all three.

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Reports

1. Results of the First Annual Meeting of the Virginia Natural History Society

The first annual meeting of the VNHS was held on 19 May 1994 at James Madison University, Harrisonburg, VA as a new section of the Virginia Academy of Science entitled "Natural History and Biodiversity." The following talks were presented:

The public's attitude toward snakes: preliminary survey results from park-goers. R. A. S. Wright.

Possible biodiversity implications: 1992-1993 Turkey Run Park herpetological survey. D. A. Lindholm.

Amphibian biodiversity and community structure in five forested habitats on Shenandoah Mountain, Virginia. J. C. Mitchell, K. A. Buhlmann, & C. A. Pague.

Mammal biodiversity and community structure in five forested habitats on Shenandoah Mountain, Virginia. J. F. Pagels, S. C. Rinehart, J. C. Mitchell, K. A. Buhlmann, & C. A. Pague.